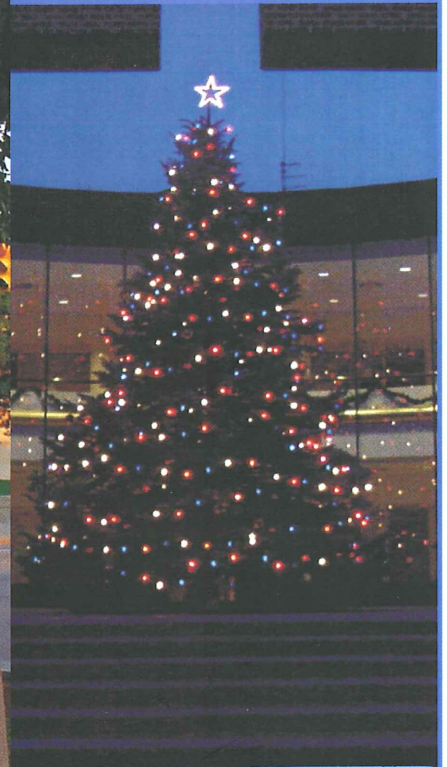
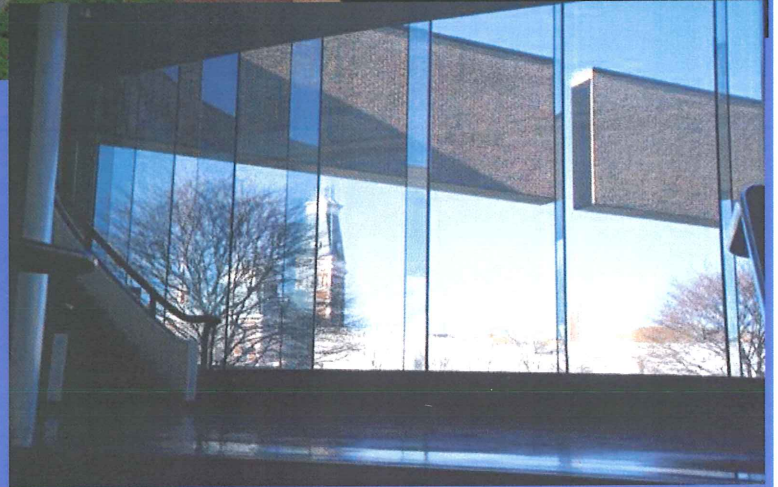


City Engineer



2001 marked the 20th anniversary of the completion of City Hall. The building and grounds were designed by Edward Charles Bassett from the San Francisco office of Skidmore, Owings, and Merrill. The project was built at a cost of \$5.5 million. City Hall faces the Bartholomew County Courthouse, symbolic of the cooperation of the two branches of local government.



2001 Annual Report of the City Engineer

ROCKY FORD ROAD CONSTRUCTION COMPLETED

Mayor Fred Armstrong officially opened the newly reconstructed Rocky Ford Road on April 30, 2001. The Bartholomew County Commissioners and City Council representatives were also on hand to open the widened bridge over Haw Creek.



Mayor Armstrong along with the County Commissioners, members of the City Council, and representatives of SIECO and Milestone prepare to cut the ribbon to open Rocky Ford Road.

The road had been closed since the Board of Public Works and Safety signed a contract on July 25, 2000 with Milestone Contractors for the third phase of the Rocky Ford Road Improvement Project. This phase of the project, from Candlelight Drive to Marr Road, cost \$998,800.00, excluding the County's contract with Milestone for the bridge reconstruction. The project included widening the street to four lanes, the installation of curbs and storm sewers, the construction of a "People Trail" sidewalk on the north side of the street.



Crews from Milestone Contractors pour the deck overlay on the Rocky Ford bridge over Haw Creek.

A new bridge opening was also installed in the low area west of the existing bridge so that the road could be raised approximately eighteen inches. The new bridge and elevated roadway should prevent the road from being inundated by flood waters as frequently as in the past.

Most of the work on the project from Candlelight Drive to the bridge was completed in 2000. That portion of the project was opened to traffic in November. The bridge work continued until a concrete deck overlay was placed in April.

The project was designed by SIECO, Inc. Three parcels of right-of-way were acquired for this phase of the project.

Two previous phases of the project have been completed. In 1998, Middle Road was improved north of Rocky Ford Road. In 1999, Rocky Ford Road was widened from Central Avenue to Candlelight Drive.

The next phase of the project, from Marr Road to Taylor Road, is scheduled for construction in 2003. The City is currently acquiring right-of-way for the Taylor Road extension, to be constructed in 2002. The county will be constructing a new bridge on the new roadway in 2002 also.

CITY ENGINEERING STAFF

David Hayward	City Engineer
Steve Rucker	Assistant City Engineer
Randy Sims	Senior Engineering Technician
Rebecca Douglas	Technician
Tim Darnall	Technician
Julie Moisant	Technician
Shawn Plummer	Technician

CE Express!

For this year's news in brief
see back page

SEVENTH STREET BRIDGE REPLACED

The City of Columbus and Bartholomew County have been working together since 1995 to replace the Seventh Street bridge over Haw Creek. The old two-lane structure, built in the early 1900's, could not efficiently handle the 6500 vehicles that travel 7th Street each day. The new bridge has four traffic lanes and sidewalks on both sides.



An American Construction crew lifts a concrete box beam into place on the Seventh Street Bridge.

In March, the Indiana Department of Transportation awarded a contract to American Construction of Jeffersonville for the project. The completed project was opened on December 5 at a cost of \$1,690,237.15. Federal funds paid 80 percent of the total project costs.

The County was responsible for the bridge portion of the project totaling \$820,083.30 and the City was responsible for the streets, sidewalks, storm sewers, and the traffic signal totaling \$870,153.85. The City also purchased the right-of-way for the project at a cost of \$157,978.

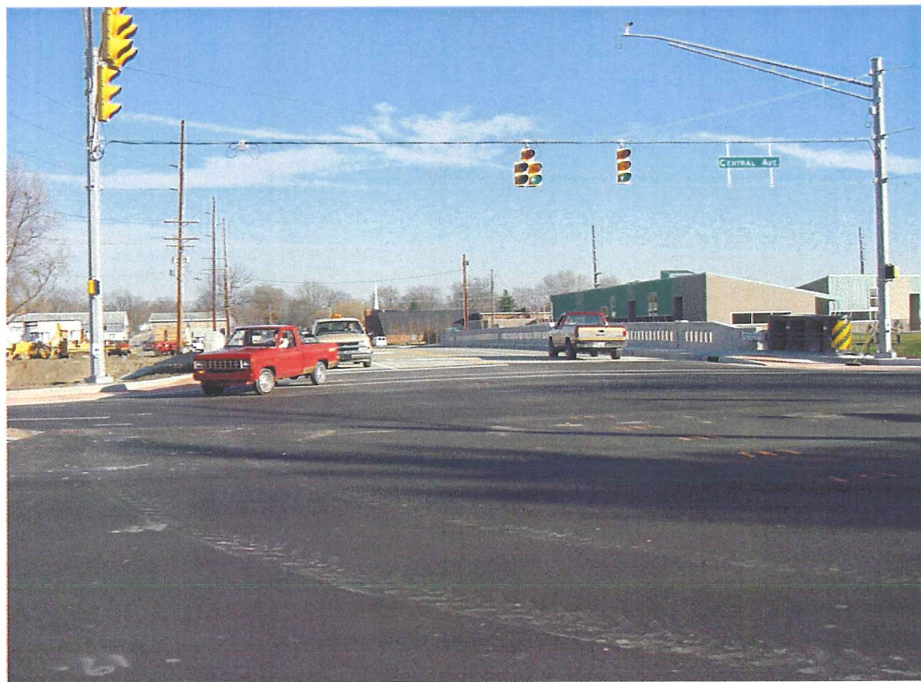
American Construction began working on the project in

early May with the reconstruction of 7th Street east of the bridge and Pleasant Grove Drive. The project also included the reconstruction and widening of 7th Street between Central Avenue and Cottage Avenue. The left turn lane for southbound traffic on Central Avenue was also lengthened.

The project was designed by SIECO, Inc. SIECO also provided the right-of-way services and construction engineering for the project.



Looking east on 7th Street at the old bridge over Haw Creek.



Looking east on 7th Street at the new bridge and actuated traffic signal. Note the new Cummins Child Care Center in the background.

ANNUAL STREET PROGRAM COVERS 27 MILES

The City Engineer's office continued to apply preventive maintenance strategies extend the life cycle of our streets. This year's overlay, patching, crack sealing, and concrete repair projects covered approximately 11.7% of the City's 230.5 miles of streets.

Overlay	12.08 miles
Milling & Patching	0.85 miles
Crack Sealing	14.36 miles
Concrete Repairs	<u>0.13 miles</u>
Total	27.42 miles



A Milestone crew begins re-paving Washington Street.

OVERLAY

The City of Columbus contracted for the re-paving of approximately 12.08 miles of streets on July 3, 2001. The low bid of \$496,924.33 was submitted by Milestone Contractors, L.P.

Milestone also raised manholes, water valves, and detector housings and installed thermoplastic pavement markings as part of the project. The work was completed in November.

Some of the most noteworthy streets in the program were Central Avenue, Taylor Road, South Marr Road, and Washington Street.

NEW PAVEMENT MARKINGS

Mike Madrid Company installed new pavement markings on 25th street between Hawcreek Blvd. And Jordan Ave. the \$6,204 project replaced old, deteriorated markings.

MILLING AND PATCHING CONTRACT

The City opened quotes for two phases of milling and patching in May and June. CASE Construction submitted the low quote in the amount of \$29,707.00 for patching at 18 locations and Milestone Contractors submitted the low quote in the amount of \$17,650.00 for patching at 5 locations. Both projects were completed in June.

CRACK SEALING PROGRAM

Reece Seal Coating, Inc. sealed cracks on twelve city streets, totaling approximately fourteen miles. This project was part of an ongoing effort to increase the life of city streets through improved preventive maintenance. Sealing the cracks prevents water and salt from penetrating into the pavement causing damage during freeze/thaw cycles. The \$43,599.75 project was completed in July.

CONCRETE STREETS REPAIRED

On April 27, the City awarded a contract for concrete street repairs in Everroad Park West. Central Indiana Contracting was awarded a \$38,623 contract for repairs to the section of Haw Creek Boulevard in between Lucas Way and Streamside Drive. The project was completed in June.

On December 11, the City also awarded a contract to CASE Construction for repairs to Holly Hill Court in Harrison Hills. The \$19,000 project is scheduled for completion by May 15.



Central Indiana Contracting removes old concrete to prepare for new pavement on Hawcreek Boulevard.

DRAINAGE PROJECTS

The City Engineer's Office aggressively sought to find solutions for several drainage problems. The following is a listing of the most significant repairs.

15th Street

During heavy downpours, the intersection of 15th and Franklin Street occasionally flooded due to the lack of capacity in the combination sewers. The City Engineer's Office determined that the area could be drained by a storm sewer extension from Lawton Avenue and prepared plans and specifications for the project.



Central Indiana Contracting excavates for a new storm sewer on 15th Street.

The City contracted with Central Indiana Contracting for the construction of the project on September 4. The project, which cost \$137,409.55, was completed in November.

Keller Avenue

The City opened quotes on May 8 for the installation of a new storm sewer on Keller Avenue between 23rd Street and 22nd Street. The project was designed to alleviate ponding near the intersection of 22nd and Keller. CASE Construction submitted the low quote of \$24,987.00. The new storm sewer pipe connected to the Hawcreek Avenue system which was installed in 1996.

Tenth Street Culvert



Natural Construction Resources installs a 60" polyethylene liner inside a 72" culvert on Tenth Street.

The City contracted with Natural Construction Resource to re-line a corrugated metal culvert pipe under Tenth Street this fall. The culvert was originally installed in 1978 as part of the Tenth Street Improvement Project. The culvert had deteriorated and had developed several holes which could eventually cause pavement damage. The culvert is located at the entrances to the new Lowe's and Wal-Mart stores. Once the new entrances are completed, the installation of the liner would have been much more difficult and expensive. The project cost \$73,014.40.

Drainage Repair Projects

The City awarded contracts totaling \$323,577.86 for miscellaneous drainage repairs and improvements in 2001. This work was awarded through the quote process to local contractors. The 2001 drainage projects included:

Storm Sewer Pipe, New	1277'	Repaired	236'
Inlets, New	3	Repaired	18
Dry wells, New	2	Repaired	0
Curb, New	140'	Repaired	179'
Sidewalk, New	0 sft	Repaired	80 sft
Pavement Repairs	770 sft		

The largest projects included in the list were at 10th and Cottage, Channel and Leatherback, Union Street, and on Road 200S near Crossing Lane.

WalkWorks 2000

WalkWorks 2001 replaced 2202 linear feet of sidewalk across 24 lots. The total cost of the program was \$47,955.67. The City also installed 28 new curb ramps as part of the *Walkworks* program.

WalkWorks, the City's sidewalk replacement program, was established in 1991 to encourage property owners to replace unsafe, deteriorated sidewalks and to build new sidewalks. The program has facilitated the replacement of more than eight miles of sidewalks in the last eleven years.

This year the City reimbursed property owners \$10 per foot of sidewalk after it was replaced and inspected.

CURB RAMPS

The City has contracted with CASE Construction for 103 curb ramps along streets that were overlaid this year as required by the Americans with Disabilities Act (ADA). The ramps will be completed by next May by at a cost of \$73,935. Eighteen more curb ramps were being quoted in December for completion next spring.

Additionally, The City installed 28 new curb ramps as part of the *WalkWorks* program and 15 new ramps with the Seventh Street Bridge improvements.



A crew from CASE Construction installing new curb ramps at 4th and Brown.

In total, the City contracted for or constructed 146 new curb ramps in 2001. The City has installed 924 curb ramps since it began implementing the ADA requirements in 1993.

TRAFFIC SIGNAL PROJECTS

INDOT awarded a contract in 2000 for the installation of a new traffic signal at the intersection of SR 11 and 200S. The signal was completed this spring.

As part of the Lowe's development, the developer was required to install a new traffic signal along Tenth Street. The new signal will also control traffic at the entrance to the new Wal-Mart store which is scheduled to be constructed next year.

The City has contracted with Signal Construction for the signal at 25th and Washington to be modernized. The project will include a new pole, new controller, and new LED traffic signals.

As part of the Seventh Street Bridge project, the traffic signal at 7th and Central was replaced. The City has subsequently contracted with the James H. Drew Corporation to upgrade the signals on Central Avenue at 8th and 10th. The new signals should move traffic more efficiently through the area.

NEW STREETLIGHTS

Cinergy has completed the installation of new street lighting on Brown and Lindsey Streets. This year, new lights were installed from 5th Street to Washington Street at a cost of \$77,067. This completes a three-year project to replace the old lights which were installed in the 1970's.

Highway Accidents in Context

The following statistics from the Transportation Research Board provide an interesting context for the problem of highway accidents and fatalities:

- Every 34 minutes someone is murdered; every 13 minutes someone dies in a highway crash.
- Every 35 seconds there is an aggravated assault; every 15 seconds there is a highway injury.
- America lost 620,000 citizens during all wars since 1775; more than 3 million were lost on the nations highways during the last century.
- In 1998 fewer than 700 people died in airplane crashes; more than 41,000 died in highway crashes.

STATE PROJECTS

The Indiana Department of Transportation (INDOT) completed several projects this year and continues to work on the design and construction of several more projects.

This spring, Milestone Contractors was hired by INDOT to overlay 2nd Street from Jackson Street to State Street. The project was completed in May.

Construction began last spring on the improvements on SR 46 from SR 11 to I-65. The project is scheduled to be completed by the end of August, 2002. The project includes pavement reconstruction, construction of medians, installation of pedestrian facilities, and lighting improvements.



Motorists on the west side of Columbus need to endure one more year of construction before the SR 46 improvements are completed.

First Group Engineering has continued to prepare plans for the improvements on US 31. A public hearing on the project was held last spring. Construction is expected to begin in 2004 and is expected to take two years. The project includes widening the road to four lanes plus left turn lanes, sidewalks on both sides, storm sewers, and new bridges over Clifty Creek.

Construction of a new bridge on US 31 over Flatrock River is expected to begin in 2002. INDOT is currently acquiring right-of-way for the new four lane structure.

FORECAST 2002

The City Engineer's Office is already busy planning and preparing projects for the next construction season. Plans are ready and rights-of-way are being secured for the extension of Taylor Road from Rocky Ford Road to County Road 300N. This project will connect with the bridge over Haw Creek which will be built in 2002 by the County. Future phases of the project include widening Rocky Ford Road in 2003 and widening Marr Road in 2004.



Looking north from the intersection of Rocky Ford Road and Taylor Road along the proposed Taylor Road extension.

The major drainage project next year is expected to be the extension of a storm sewer pipe on Chestnut Street from 5th Street to 7th Street. The City also plans to construct storm sewer projects to alleviate drainage problems around the East High School ponds and to improve drainage in the Sandy Hook area.

Wayfinding signs are expected to be installed by city crews beginning next spring. The new signs will help guide visitors to schools, parks, the Visitors Center, and other popular destinations.

Now that the City has adopted the goals and policies for its new comprehensive plan, the new Thoroughfare Plan is being reviewed for presentation to the Plan Commission early in 2002.

CE *Express*

The year's news in brief

❑ **Rocky Ford Road**

The Rocky Ford Road improvement project from Middle Road to Marr Road was completed in April. The project cost \$998,800, excluding the County's bridge reconstruction costs. The next phase, from Marr Road to Taylor Road, is scheduled for construction in 2003.

-see page 2-

❑ **Seventh Street Bridge**

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-see page 3-

❑ **Annual Street Program**

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❑ **15th Street Storm Sewer**

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❑ **Keller Avenue**

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-see page 5-

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-see page 5-

❑ **WalkWorks 2001**

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-see page 6-

❑ **Curb Ramps**

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-see page 6-

❑ **State Projects**

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-see page 7-

❑ **Forecast 2002**

The City Engineer's Office is already busy planning and preparing projects for the next construction season. Major construction projects scheduled for 2002 include the Taylor Road extension, the Chestnut Street storm sewer project, the Columbus East drainage improvements, and the wayfinding project. Staff will also devote time to the development of a new thoroughfare plan, implementation of new storm water regulations, and continued expansion of our asset management systems.

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